



HARWICH FD 2
149 Route 137
East Harwich, MA 02646

Prepared by: **Todd M. Costa**
Date: **January 16, 2018**
Page: **1 of 1**

KBA Project Updates:

- **Design Development Update**
 - Review Design Development Opinion of Probable Cost
- Test Pits/Borings for Structural have been identified.
 - Geotech Exploration Proposal is attached for approval -
- Existing Conditions Explorations, (hazardous material testing)
 - Hazmat Material Testing Additional Service Proposal - \$1,500
- Test Pits/Borings for Civil to be identified
- Exterior massing and material review
- Design Development Budget Review and Approval for Construction Documents to begin.
- Meetings
 - Fire Department Meeting @ KBA Office Jan. 30, 2018
 - Review Exterior Materials
 - Mechanical Systems
 - Site Plan Review
 - Plan is to submit drawings by the end of the month for review / meeting.
 - Meeting with Highway Department & Engineering
 - Review rainwater from intersection flowing into site
 - Planning Board
 - Zoning Board of Appeals
 - Civil Engineer meetings with Health Department.

Attachments:

- Opinion of Probable Costs
- Hazmat Testing Additional Service Proposal to KBA
- KBA Additional Service Geotechnical Proposal



Harwich Fire Station 2

January 16, 2018

Design Development Opinion of Probable Costs

* preliminary figures based on \$/sf approximation by estimator. Used to determine order of project magnitude

Description	Subtotals	Total:	Comments
Construction Costs			
Building Demolition		\$46,000	
Hazmat Abatement		\$15,000	assumed (no report)
Sitework		\$635,384	
New Construction	10,365 SF	\$3,792,710	
Subtotal:	10,365 SF	\$4,489,094	
Concept Level Estimating Contingency @ 5.0%		\$224,455	
Subtotal Direct Construction Costs:		\$4,713,549	
General Conditions & Overhead @ 7.50%		\$353,516	
Insurance @ 1.00%		\$50,671	
Bonds @ 0.65%		\$33,265	
GC Fee (Profit) @ 3.00%		\$154,530	
Permit Fee @ 1.50%		Waived	
Escalation (bid 1st Quarter of 2018) @ 2.00%		\$106,111	
Subtotal Construction Cost:		\$5,411,642	
Owner's Indirect Costs			
Temp Relocation		\$0	
Land Survey		\$0	performed by Tos
Geotechnical Field Observation		\$11,000	Allowance
Arch.& Eng.Fees (Phase II)		\$180,000	Balance not including phase I
Temp Facility Review		n/a	To be included/
Traffic Engineering		n/a	Not required
Communications Equipment Design		n/a	
Project Management (4%)		n/a	
Firematic Equipment		\$50,000	Allowance
Furniture & Furnishings		\$95,000	Allowance
Communications Equipment		\$50,000	To be determined
Network & Computers		\$50,000	To be determined
Utility Backcharge		\$25,000	Allowance
Moving		\$25,000	Included in Temp Relo?
Bid Doc Reproduction / Miscellaneous		\$5,000	Assume OnLine Service
Legal/Advertising		\$5,000	
Material Testing		\$25,000	
Owner's Contingency (6% of all costs)		\$356,000	
Subtotal Indirect Costs:		\$877,000	
Total Project Cost:		\$6,288,642	

January 16, 2018

Mr. Christopher Clark
Town Administrator
Harwich Town Hall
732 Main Street
Harwich, MA 02645

Re: Fee Proposal, Harwich Fire Station #2– Geotechnical Exploration

Dear Mr. Clark:

In response to the committee's request, Kaestle Boos Associates, Inc. (KBA) is pleased to submit a lump sum design services fee proposal for of the Geotechnical Design services at the Harwich Fire Station #2 Project.

Work Plan:

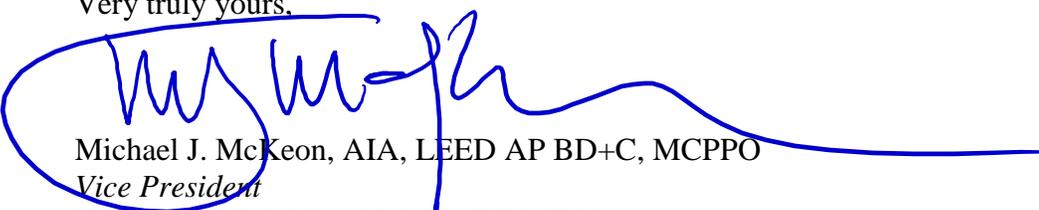
KBA's consultant will provide design service based on line items 1 thru 7 of the attached geotechnical service proposal. The proposal is provided assuming that the Harwich Department of Public Works can provide a backhoe to dig test pits for observation and tree removal as needed for the drill rig to access the boring location indicated in the plan. Line items 8 thru 11 will be included as part of the phase 2 proposal based on a successful town meeting and ballot vote.

Fee Breakdown:

We propose to provide the above-stated professional services for a lump sum fee of **Eleven Thousand One Hundred Twenty-Six Dollars (\$ 11,126)** based on the subtotal of item 1 thru 7 of \$9,675 and KBA administrative mark-up of \$1,451. The total amount will be invoiced over two months following the approval.

We appreciate the opportunity to submit this proposal and sincerely look forward to working with the Town of Harwich in the planning of this important project. We strongly identify with, and share, the Town's commitment to providing up-to-date public safety facilities that support all the Town's operational needs and helps ensure the safety and wellbeing of the Harwich community.

Very truly yours,



Michael J. McKeon, AIA, LEED AP BD+C, MCPPO
Vice President

KAESTLE BOOS ASSOCIATES, INC.

Attachment: LGCI original proposal



January 11, 2018

Todd M. Costa, AIA
Kaestle Boos Associates, Inc.
325 Foxborough Blvd., Suite 100
Foxborough, MA 02035
Phone: (508) 549 9906
Fax: (508) 549-9907
E-mail: tcosta@kba-architects.com

**Re. Proposal for Geotechnical Services
Proposed Fire Station No. 2
Harwich, Massachusetts
LGCI Proposal No. 18004**

Dear Mr. Costa:

Lahlaf Geotechnical Consulting, Inc. (LGCI) appreciates the opportunity to submit this proposal to provide preliminary geotechnical services for the proposed Fire Station No. 2 in Harwich, Massachusetts. Our proposal is based on information provided to us in your request for proposal (RFP) dated January 10, 2018 and during our subsequent phone conversation.

The purpose of our services is to explore the subsurface conditions at the site and to provide recommendations about feasibility of shallow foundations. We have also included in this proposal services related to field observations during construction.

Project Understanding and Site Description

We understand that the Town of Harwich plans to build a new fire station at the site of Fire Station No. 2. The site is located at No. 149 Route 137 in Harwich, Massachusetts. The site is currently occupied by the existing one-story Fire Station No. 2 building, driveway, parking lot, and wooded land. Based on an undated drawing titled: "Harwich Fire Station #2," prepared by Kaestle Boos Associates, Inc. (KBA) and provided to us with the RFP, the grades at the site range between El. 92 feet near the southern side of the site and about El. 102 feet near the northern side of the site.

We understand that the proposed station will be constructed in the currently wooded area on the southern side of the site. We understand that the proposed station will have a footprint of about 10,000 square feet, will be one story high, and will not have a basement.

Technical Approach

The RFP included a plan showing five (5) borings. Tree clearing will be required to access the boring locations within the proposed building footprint. We have assumed that the trees will be cleared by the Town of Harwich DPW using DPW personnel and equipment before the start of our borings. We have assumed that the DPW will also excavate four (4) to six (6) test pits within the proposed parking lot and driveway.

Proposed Scope of Work

1. Utility Location – LGCI will mark the exploration locations in the field by taping the distances from the existing landmarks. We will contact the utility clearance agency, Dig Safe Systems, Inc. (Dig Safe) and the Town of Harwich to assist the owner in locating underground utilities at the site. We request that you provide us with current utility plans. We request that a representative of the Town observe our marked exploration locations to clear them for private utilities, including water, sewer, and drains. LGCI will not assume responsibility for damage to unmarked or mismarked underground features and utilities.
2. Tree Clearing and Test Pits – We request that the Town of Harwich DPW clear a path to the proposed boring locations. We also request that the DPW perform up to six (6) test pits at the site. The test pits should be advanced to depths of about 12 feet or to refusal, whichever occurs first. The test pits should be backfilled with the excavated material that should be placed in 1 to 2-foot lifts and compacted with the excavator bucket.
3. Drilling Subcontractor – We will engage a drilling subcontractor to advance up to five (5) borings as requested in the proposal. One boring will be advanced to a depth of up to 40 feet, the remainder of the borings will be advanced to depths of up to 20 feet. We may substitute one test pit for a boring. The drilling subcontractor will perform standard penetration tests (SPT) and obtain split-spoon samples at 5-foot intervals and at perceived strata changes.

We have assumed that no permits are required to perform the borings, and that no coordination with the local conservation commission is needed. If we encounter an environmental condition in a boring, we will halt the drilling and we will notify you.

We estimate that the borings will be completed in one (1) day. We have assumed that our explorations will be performed during a normal 8-hour shift between 7:00 a.m. and 3:00 p.m. We have assumed one mobilization of the drilling equipment.

4. Geotechnical Field Engineer – We will provide a field engineer at the site to coordinate and observe the test pits and borings, collect soil samples, and prepare field logs.
5. Laboratory Testing – We will submit two (2) soil samples from the test pits for grain-size analysis or Atterberg Limits. The purpose of the tests is to assess the suitability of reusing the onsite materials as backfill.



6. Geotechnical Report – We will prepare and submit our report electronically. Our report will include the following:
 - Summary of the subsurface investigation methods used;
 - Description of the subsurface conditions;
 - LGCI’s boring logs;
 - LGCI’s test pit logs;
 - Depth to refusal, if encountered;
 - Plan showing boring and test pit locations;
 - Groundwater data;
 - Laboratory test results;
 - Our opinion about the feasibility of shallow foundations;
 - Recommendations for allowable net bearing pressures for shallow foundations, or alternate foundation system, if needed;
 - Seismic Recommendations in accordance with the Massachusetts State Building Code, Ninth Edition; and
 - Recommendations for subgrade preparation and backfill including removal of unsuitable soils, and suitability of reusing onsite materials as backfill.

7. Review Specifications and Drawings – We will review the Earth Moving Specifications prepared by KBA, and we will review the geotechnical aspect of the foundation drawings and provide written comments. We have budgeted six (6) hours for this task.

8. Kickoff Meeting for Field Services – We propose attending a kickoff meeting with KBA, the OPM, and the site contractor prior to the start of site clearing and the construction phase. We have budgeted six (6) hours for this task, including traveling to and from the meeting.

9. Contractor Submittals and RFIs – LGCI will assist KBA in reviewing requests for information (RFIs) related to geotechnical issues. We have budgeted eight (8) hours for this task.

10. Observe Subgrade Preparation – We will provide a geotechnical engineer to observe the removal of the topsoil and the existing fill, and the subgrade of the proposed footings and slabs. We have not included in our scope observing the subgrade of paved areas. Please let us know if you wish for us to observe this work. Our engineer will also provide recommendations about the suitability of backfill materials. In addition, we would be pleased to attend site meetings regarding the foundation work, if requested. Our scope does not include observation of backfilling operations and field density testing. We understand that the owner will retain a separate testing agency to perform these services. We have assumed that eight (8) site visits will be needed for our services. We have budgeted nine (9) hours per visit, including travel to and from the site. If construction takes place during inclement weather or in the winter months, the number of our site visits may need to be increased due to additional time taken for construction.



11. Field Observation Reports, Review and Coordination – We will provide a geotechnical engineer to consult with you and with the contractor during earthwork operations. Our engineer will prepare daily field reports containing a summary of our observations and a summary of the geotechnical recommendations made in the field. Our reports will be submitted weekly at the beginning of the week following our visits. We have budgeted about one hour per field report and eight (8) hours for a project manager’s time for coordination and review.

Recommendations for unsupported slopes, stormwater management, erosion control, pavement design, detailed cost, slope stability analyses, and quantity estimates are not included in our scope of work.

LGCI will not perform an assessment to evaluate the presence or absence of hazardous or toxic materials above or below the ground surface at or around the site. Any statement about the color, odor, or the presence of suspicious materials included in our boring logs or report will be made by LGCI for information only and to support our geotechnical services.

Proposed Schedule

Assuming that there are no delays with site access or other factors such as permitting, LGCI will begin scheduling the field exploration work upon receiving authorization in the form of a signed copy of this proposal. Our drilling subcontractor will mobilize to the site within about two to three weeks of receiving authorization to proceed or the borings being cleared of utilities, whichever occurs last. LGCI can provide you with preliminary boring and test pit logs, and preliminary geotechnical recommendations within one week of completing our field work. Our letter report will be submitted within about two weeks of completing the borings and test pits.

During construction we generally require one week to respond to contractor submittals and RFIs, and we require a one-week notice for the first site visit. During construction, we will coordinate our work with the contractor. We request a minimum of a 2-day notice before each visit.

Project Fee for Geotechnical Services

We propose performing our services described in scope items 1 to 7 for the lump sum of **\$9,675**, and our construction phase services on a time-and-expenses basis using the rates shown below. For our construction phase services (scope items 8 to 11), we recommend budgeting **\$11,000**.

Field Engineer: \$95/hour

Senior Engineer: \$125/hour

Mileage: 0.54/mile

Other Expenses: At cost + 15 percent

Additional days of drilling will be billed at \$3,750 per day, including our field engineer and paying the prevailing wage rates for the drillers.



**Proposal for Geotechnical Services
Proposed Fire Station No. 2
Harwich, Massachusetts
LGCI Proposal No. 18004**

The breakdown of our fee is shown below:

Explorations, Report, and Specs		
1a	Mark Borings and Utility Clearance	\$620
1b	Utility Clearance	\$175
2	Tree Clearing and Test Pits (By Town)	
3a	Coordinate with and Engage Drillers (M/D + 1 day)	\$2,600
3b	Prevailing Wages for Drillers	\$650
5	LGCI Engineer (2 days for borings and test pits)	\$2,100
5	Laboratory Testing	\$180
6	Geotechnical Report	\$2,600
7	Review Specs and Drawings	<u>\$750</u>
		\$9,675
Field Services During Construction		
8	Kickoff meeting at project site	\$800
9	Contractor Submittals and RFIs	\$750
10	Observe Subgrade Preparation	\$7,740
11	Field Observation Reports, Review and Coordination	<u>\$1,760</u>
		\$11,000

No services beyond those described above would be provided without your prior knowledge and approval. If site conditions or your needs require a change in the scope of work, we will prepare for your approval a change order request that summarizes the changes to the project scope and fee. The fee is based on the following additional conditions:

- Our costs and fees indicated in this proposal are valid for a period of six months from the date of the proposal. Our unit rates will be increased by 4 percent per year after the first 6 months following the date of this proposal.

Terms and Conditions

We propose to perform our work in accordance with LGCI's Standard Conditions for Engagement (attached). Your acceptance of this proposal by signing and returning one complete copy will form our agreement for these services, and will serve as written authorization to proceed with the described scope of work.

LGCI trusts that the above proposal will be sufficient to meet your needs. If this proposal is acceptable, please sign and return a complete copy of this proposal to LGCI. If you have any questions, please call us at (978) 330-5912.



Proposal for Geotechnical Services
Proposed Fire Station No. 2
Harwich, Massachusetts
LGCI Proposal No. 18004

Sincerely,

LAHLAF GEOTECHNICAL CONSULTING, INC.



Abdelmadjid M. Lahlaf, Ph.D., P.E.
Principal Engineer

Enclosures: LGCI's Standard Conditions for Engagement

Agreed to by (please type name): _____ **on (date):** _____

Company Name: _____

Signature: _____



August 28, 2017

Mr. Todd Costa
Kaestle Boos Associates, Inc.
325 Foxborough Boulevard, Suite 100
Foxborough, MA 02035

Reference: **Proposal for Hazardous Materials Inspection Services
Harwich Fire Station #2**

Dear Mr. Costa:

Thank you for the opportunity for Universal Environmental Consultants (UEC) to provide professional services.

We are pleased to submit our proposal for the above referenced project.

Should this proposal meet with your approval, kindly execute and return the enclosed proposal.

Please do not hesitate to call me at (508) 628-5486 if you have questions about this proposal or our services.

Very truly yours,

Universal Environmental Consultants



Ammar M. Dieb
President

UEC:\proposals\IDM\KBA-Harwich Fire Station-I

Enclosure

**PROPOSAL
FOR
HAZARDOUS MATERIALS INSPECTION SERVICES
AT
HARWICH FIRE STATION #2
HARWICH, MA**

UEC will provide the following services.

SCOPE OF WORK:

Services will be provided by Massachusetts licensed asbestos inspectors.

- A. **Inspection for Asbestos Containing Materials (ACM)** – Conduct an inspection of select areas within the building.
- B. **Bulk Samples Collection** – Collect bulk samples from suspect materials and analyze these samples for asbestos by Polarized Light Microscopy (PLM) using the Point Count Method (if needed). Bulk samples will be collected and analyzed from the following materials suspected to contain asbestos:

Floor Tile and Mastic	Ceiling Tile	Glue on Ceiling Tile	Thermal Insulation
Window Putty	Door Putty	Stage Curtain	Ceiling/Wall Plaster
Transite Board	Vapor Barriers	Soffit Panels	Fire-proofing
Science Lab Tables	Damproofing	Unit Vent Grille Caulking	Skim Coat

- C. **Inspection for Lead Based Paint** – Collect bulk samples to determine the presence of lead in painted surfaces. Analyze samples to verify the level of lead in paint by Atomic Absorption.
- D. **Inspection for PCB's** – Perform a visual inspection of the light fixtures for PCB's in ballasts and for Mercury in tubes. No testing will be performed.
- E. **Prepare a Final Report** – Prepare a final report with samples results, locations and quantities of ACM and other hazardous materials and cost estimates for remediation.

FEE:

Fee for services will be charged on a Lump Sum basis
The Lump Sum fee of

\$ 1,300.00

Proposal Authorized By:



Ammar M. Dieb
President

Proposal Accepted by:

Signature: _____

Name: _____